

Claim 3. I claim the access system of claim 1 characterized in that the programs are stored in a compressed format.

Claim 4. I claim the access system of claim 1 characterized by the addition of program information transmitted to and stored at the user's location and means to access said program information.

Claim 5. I claim the access system of claim 4 characterized by the addition of data manager means to allow user to access the program.

Claim 6. I claim a system having multiple programs transmitted in a compressed form on a transmission media together with program identification data to a user at a given user location, the system including means at the given user location to record program identification data for the multiple programs,

means at the same given user location to access the recorded program identification data for the multiple programs and means at the same given user location to process the recorded program identification data to allow selective access to at least one of the multiple programs.

Claim 7. I claim the system of claim 6 characterized in that the multiple programs and program identification data are transmitted contemporaneously and by

the addition of means to delay the programs to allow processing of the program identification data.

Claim 8. I claim the system of claim 6 characterized by the addition of data manager means to process the program identification data.

Claim 9. I claim the access system of claim 6 characterized by the addition of data manager means to allow the user to access the programs.

Claim 10. I claim an improved system for transmitting multiple programs in a compressed form via a transmission channel from a transmitting site to a particular user's location without the particular user's control characterized by the addition of means to store at least certain of the multiple programs in their compressed form at the particular user's location and means at the particular user's location to selectively access and decompress the programs at that location respectively.

Claim 11. I claim the access system of claim 10 characterized in that said means to store the programs includes an optical storage medium.

Claim 12. I claim the access system of claim 10 characterized in that said means to store the programs includes computer memory.

Claim 13. I claim the access system of claim 10 characterized in that the programs are compressed in a MPEG type form and means to selectively decompress said MPEG type signals.

Claim 14. I claim an access system having a storage capability with a limited capacity, the improvement of means to store materials in the storage having a limited capacity, and overwrite means to automatically overwrite previously stored material including at least some material which has not been previously accessed based on determinable criteria developed from a known set of priorities.

Claim 15. I claim the system of claim 14 characterized in that said overwrite means includes consideration of available storage.

Claim 16. I claim the system of claim 14 characterized in that said overwrite means includes consideration of the time the program was stored.

Claim 17. I claim the system of claim 14 wherein there are multiple users having a priority and characterized in that said overwrite means includes consideration of the multiple user's priority.

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Claim 19. I claim an access system having a storage capability for programs, the improvement of means to store programs in the storage area and means to automatically allow access for storage of programs in previously utilized storage area upon occurrence of a certain event other than the accessing of the then program in such storage area.

Claim 20. I claim the access system of claim 19 characterized in that said certain event is the arrival of a certain time subsequent to the time of a particular program's storage.

Claim 21. I claim an access system having an ability to reproduce an accessible program having a certain intended run time of presentation, for a user requiring a different run time of presentation, the improvement including means to select the accessible program from multiple programs and means to alter the certain run time of presentation of the accessible program to the different run time.

Claim 22. I claim the access system of claim 21 wherein the different run time is determined by the user's interruption of access to the programs.

Claim 23. I claim the access system of claim 22 characterized in that said accessible program would normally terminate at a time certain and characterized in that said means alters the different run time so as to terminate said accessible program at the same time as said time certain.

Claim 24. I claim the access system of claim 23 characterized in that said means is automatic.

Claim 25. I claim an access system for multiple programs transmitted in compressed form across a transmission channel, the multiple programs include at least one program transmitted without a given user's request therefor, a program data stream said access system including, means at the given user's location to select a particular program from said program data stream without off location contact, means to record said selected program in a data storage media, and means to decompress said selected program.

Claim 26. I claim the system of claim 25 characterized in that program identification data is also transmitted for those programs transmitted without a given user's request the multiple programs and program identification data being transmitted substantially contemporaneously and by the addition of means to delay the programs to allow processing of the program identification data.

Claim 27. I claim the system of claim 26 characterized by the addition of data manager means to process the program identification data.

Claim 28. I claim an access system having a storage area for programs, the improvement of means to record at least part of a given program in the storage area, means to access

at least part of said given program from the storage area so as to select reproduction thereof and means to at the same time as said reproduction to record programs including the remainder of said given program and/or another program in the storage area.

Claim 29 (Third amendment). I claim an access system having a decompression circuit and an artifact producing circuit together with means to pass programs through the artifact producing circuit, the improvement of an artifact modifier circuit for programs,

means to pass programs through the decompression circuit, means to pass programs through said artifact modifier circuit after [the] said artifact producing circuit, and means to selectively bypass the artifact modifier circuit when the artifact producing circuit is inactive.

Claim 30. I claim the access system of claim 29 characterized in that the decompression decoder is a MPEG type decoder.

Claim 31. I claim the access system of claim 29 characterized in that the artifact modifier circuit is a frequency converter means.

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Claim 33. I claim an access system having multiple channels of information for transmission of programs to a

remote location, the improvement of a data manager, said data manager being located at said remote location, said data manager having a memory for storing access information relative to the transmitted information, and means for said data manager to selectively control access to the information on the multiple channels for presentation of said programs at said remote location.

Claim 34. I claim the access system of claim 33 characterized by the addition of a data storage for the channels of information.

Claim 35. I claim the access system of claim 33 characterized by the addition of program information relative to the multiple channels of information and means for said data manager to utilize such program information.

Claim 36. I claim the access system of claim 33 characterized by the addition of other services and means for said data manager to access said other services.

Claim 37. I claim an improved access system for a particular user to access multiple programs transmitted in compressed form via a transmission channel, said access system including program information transmitted to the particular user at the given location, means for recording multiple programs in a compressed format in a data storage medium at the given location, means at the given location for the particular user to access said program information and to

select a particular program for presentation at the given location, and means to decompress said particular program.

Claim 38. I claim the access system of claim 37 characterized by the addition of data manager means to allow the user to access the program.

Claim 39. I claim a system having multiple programs transmitted contemporaneously in a compressed form via a transmission media with program identification data at least periodically transmitted to a particular user at a given location, the system including means at the given location for the particular user to directly access the program identification data, means to delay the programs to allow processing of the program identification data, means to process the program identification data at the given location, and data manager means at the given location to process the program identification data and to allow the particular user to selectively access the programs at the given location.

Claim 40. I claim an improved system for a multiplicity of programs transmitted in a compressed form on a transmission channel characterized by the addition of means to store said multiplicity of programs in their compressed form at a given location, said means to store the programs including an optical storage medium, and means to selectively access and decompress the programs from said means to store the programs at said given location.

Claim 41. I claim the access system of claim 40 characterized in that the programs are compressed in a MPEG type form and means to selectively decompress said MPEG type signals.

Claim 42. I claim the access system of claim 40 characterized in that there are a number of sets of multiplicity programs that can be selectively stored.

Claim 43. I claim an improved access system for programs transmitted via one or more transmission channels, said access system comprising a program data storage, said program data storage recording at least selected ones of the transmitted programs, a user control, said user control selectively retrieving said selected ones of the transmitted program from said program data storage, and said program data storage simultaneously recording other selected portions of the transmitted programs as said selected portion is being selectively retrieved by said user control.

Claim 44. I claim the access system of claim 43 characterized in that said selected portion and at least one of said other selected portions are from the same program.

Claim 45 (First Amendment). I claim the access system of claim 43 characterized in that said selected portion and at least one of said other selected portions are from [the same program from] different programs.

Claim 46. I claim the access system of claim 44 wherein the program of which said selected portion is a part, has a normal presentation conclusion time from initial retrieval and characterized in that the retrieval of said selected portion can be selectively interrupted by the user for a period, any retrieval of said selected portion can be accelerated to compensate for said period, and said acceleration allowing the program to end at the normal presentation conclusion time.

Claim 47. I claim the access system of claim 46 wherein the program has a frequency and characterized by a frequency shift means, and said frequency shift means altering the frequency of any accelerated portion to be substantially equal to the frequency of the program.

Claim 48. I claim an improved access system for programs transmitted via one or more transmission channels, said access system comprising a data manager, said data manager being located at a particular user's given location, a data stream, said data stream passing via a delivery channel for recording in said data manager, a user control, said user control allowing access to the data in said data manager, a program data storage, said program data storage recording at least some of one or more of the programs transmitted on the transmission channel without any active selection by the user, and means for the user at said given location to use the data in said data manager to retrieve

selected portions of the programs in said program data storage.

Claim 49. I claim the access system of claim 48 characterized in that said data stream includes information of upcoming programs.

Claim 50. I claim the access system of claim 48 characterized in that said user control can be selectively programmed to automatically record programs in said program data storage based on the data in said data manager.

Claim 51. I claim the access system of claim 48 characterized in that substantially all of the programs transmitted on a transmission channel are transmitted without any user's control.

Claim 52. I claim the access system of claim 51 characterized in that the programs are substantially continually transmitted.

Claim 53. I claim the access system of claim 48 characterized in that said program data storage can record programs and the user can retrieve a program from said program data storage at the same time.

Claim 54. I claim the access system of claim 48 wherein the program of which said selected portion is a part, has a normal presentation conclusion time from initial

retrieval and characterized in that the retrieval of said selected portion can be selectively suspended by the user for a period of time, any retrieval of said selected portion can be accelerated to compensate for said period of time, and said acceleration allowing the program to end at the normal presentation conclusion time.

Claim 55. I claim the access system of claim 54 wherein the program has an original frequency and characterized by frequency shift means, said frequency shift means altering the frequency of any accelerated portion to be substantially equal to the original frequency of the program.

Claim 56. I claim an improved access system for programs transmitted on one or more transmission channels, said access system comprising a data manager, said data manager being located at a particular user's given location, a data stream, said data stream passing via a delivery channel for recording in said data manager, a user control, said user control allowing access to the data in said data manager, a program data storage, said program data storage recording at least some of one or more of the programs transmitted on the transmission channel without any active selection of individual ones of the specific programs by the user, and select means at said given location for said data manager to use the data in said data manager to automatically record selected portions of the transmitted programs in said program data storage.

Claim 57. I claim the access system of claim 56 characterized in that said select means is programmed to discard programs recorded in said program data storage including programs not yet retrieved according to a known set of priorities.

Claim 58. I claim the access system of claim 57 characterized in that said known set of priorities includes the available recording room in said program data storage.

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Claim 59 (First Amendment). I claim the access system of claim [56] 57 characterized in that said known set of priorities are ranked in an order of preference.

Claim 60. I claim the access system of claim 56 characterized in that said known set of priorities may be changed from time to time.

Claim 61. I claim the access system of claim 55 characterized in that said select means is programmed to record transmitted programs in said program data storage according to a selection algorithm.

Claim 62. I claim the access system of claim 60 characterized in that said selection algorithm includes one or more of consideration of the desirability of the program to the user, the number of users for a program, the time of the program, the relation of the program to programs previously

stored, the content of the program, the particular channel for the program and/or the availability of removable storage.

Claim 63. I claim the access system of claim 61 characterized in that said select means is programmed to discard or record over previously recorded programs in said program data storage including not retrieved programs according to a known set of priorities.

Claim 64. I claim the access system of claim 63 characterized in that said known set of priorities includes the available recording room in said program data storage.

Claim 65. I claim the access system of claim 63 characterized in that said known set of priorities are ranked in an order of preference.

Claim 66. I claim the access system of claim 63 characterized in that said known set of priorities may be changed from time to time.

REMARKS

On April 15, 1998 the U.S. Patent and Trademark Office issued an office action objecting to claims 29, 45 and 59 on technical grounds and in addition rejecting the claims based on Ryan U.S. 5,524,051 by itself and in view of Barrett U.S. 5,287,420.